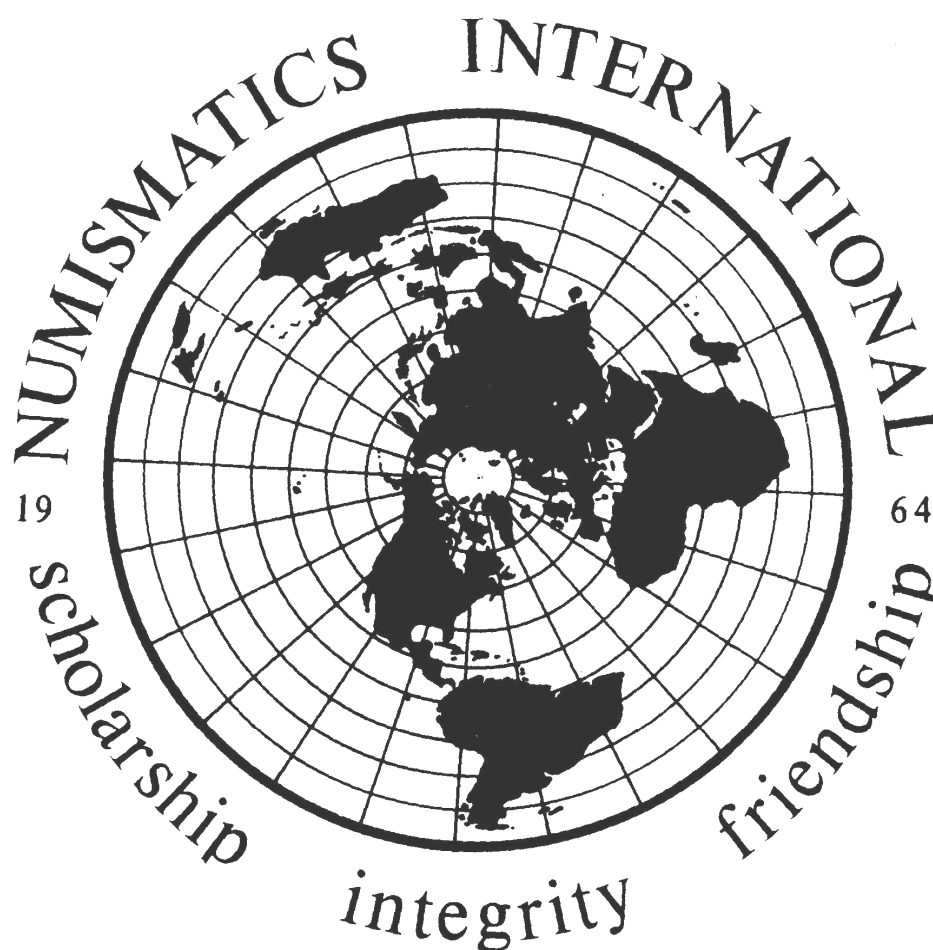


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In this edition of your bulletin we are pleased to offer some excellent articles. I am particularly gratified with the support I have from the membership. We are publishing Jean Elsen's article on the Dutch East Indies which was originally published by his firm in French. At my request Robert Ronus graciously agreed to translate the article into English for us. Considering the number of citations it was a tedious undertaking. We have another excellent article from contributor Alberto Paashaus, this time on the first Brazilian silver coin. In the editing process of his article I called upon the Geldmuseum (Money Museum), Utrecht NL, for help translating an old document. Librarian Ans ter Woerds enlisted an associate and together they satisfied this request. The Geldmuseum also provided an image of a very rare 1602 eight real of Middelburg.

I also appreciate another article on Indian coins submitted by Dr. Philip. In addition to these contributions I also acknowledge support from members Joe Lang (Steve Album) and Ponterio and Associates who generously provided text and images for the Khubilai Khan article. Finally, thanks to CNG and "The Bru Sale" for allowing NI to reprint short articles, which I hope you find as interesting as I do.

This magazine is only possible because of your willing participation.

Herman Blanton

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The Monetary Operations of the Dutch East Indies Company in the Seventeenth Century

Jean Elsen

Jean Elsen & ses Fils, NI #2696

Translated by Robert Ronus, NI #LM139

The Dutch East India Company played a primordial role in the expansion of the Republic of the United Provinces during its Golden Century, the 17th century. The great prosperity the young state enjoyed in the course of this century cannot be disassociated from the exceptional development of the *Vereenigde Oostindische Compagnie* (VOC), which was for a time the most important commercial company in the world. At the peak of its power it possessed more than half the world's sea-going ships and was the most influential of the European companies founded in the seventeenth century to exploit the riches of Asia. This flowering of industry and commerce lasted as long as the period of Dutch colonization,¹ i.e., until the middle of the 18th century. After that London gradually became preeminent. The VOC played a capital role not only in the history of the United Provinces but also in that of the principalities, sultanates and empires all along the coasts of India, Ceylon, Malaysia, the islands that today constitute Indonesia, China and Japan. With just one exception, during all the 17th century the VOC did not strike its own coinage for its Asian trade. It used the pieces of 8 reals struck in the Spanish colonies in Latin America, coins of the United Provinces and of the Spanish Netherlands and silver ingots from the Republic and Japan. In order to deal with the constant fluctuations in exchange rates and to limit the massive exodus of large silver coins, the VOC had recourse to raising the coins' value by countermarking coins with the accepted weight and precious metal content. The export of coins struck in the name of the VOC to the East Indies only began in the 18th century.

By 1570 the shipyards of the Northern Netherlands had created a new type of ship, the *flûte* (fluyt, fluit) or *Vlieboot*, a sturdy ship with enlarged broadsides to give a large amount of space but which needed a crew one-fifth smaller than other ships of the same tonnage. This lower cost constituted a considerable advantage because, in the long run, personnel costs (wages, food) were the largest item of expenses.² These ships allowed a rapid expansion of trade with the Indies from the end of the 16th century. A very large number of refugees from the Spanish Netherlands,³ Jews expelled from Spain and Portugal and French Huguenots, were among the first pioneers of trade with the Indies. The first captains were refugees from Antwerp or English officers sent by Queen Elizabeth of England to fight the Spaniards. Starting in 1593, more than 20,000 "independents," opponents of the established religion belonging to independent and autonomous churches, emigrated from England. They provided the colonial companies of the young Dutch Republic with a number of naval officers.

As a result of intervention by the *Generalité* (the federal government), the States General (representative assembly) of the Republic, and by the mayors of Amsterdam, the trading companies which had been formed at the end of the 16th century merged to form two big companies: the Holland company and the Zeeland company (1600). In this period Holland and Zeeland possessed the largest number of ships in all of Europe.⁴ Their merchant navies amounted to "200000 tons and 600000 tons at the

end of the century, which was double that of France and England combined.”⁵ As soon as they had been formed, the two new companies set themselves against each other in pitiless competition. As a result, under pressure from the Grand Pensionary (the Dutch title equivalent to Prime Minister) Jan van Oldenbarnevelt, all the trading companies active in the Indies—essentially from Holland and Zeeland—merged on March 20th, 1602 to form the United East Indies Company (*Vereenigde Ostindische Compagnie* or VOC),⁶ a commercial company founded for the purpose of trade with the Orient, with the enormous capital of 6.5 million florins, ten times more than that of its English competitor, the East India Company, founded in 1600. The VOC or, more familiarly, *Jan Compagnie* (John Company),⁷ owned by some large shareholders with 40% of its capital subscribed by exiles from the Southern Netherlands,⁸ was thus in 1602 the first true European share company and the first large limited liability company in history.⁹ It would enjoy rapid development, importing into the United Provinces quantities of pepper, spices, silk, cotton and porcelain. These purchases were financed by the profits realized in Asia and from the shipment of manufactured goods and precious metals in the form of coins and ingots.

After the closure of the river *Escaut* (or *Schelde* in Dutch) which led to the decline of the Belgian provinces, pepper and spices from Asia were directed to the Dutch ports, despite the war against Spain. One of Spanish America’s most important export products, silver, after transit through Spain, ended up for the most part in the United Provinces.¹⁰ The transformation of imported metals into the coins required for trade had become an important activity for the Republic’s mints and an international exchange market quickly developed,¹¹ essentially concentrated in Amsterdam. The capital of the province of Holland had become the greatest metropolis in the United Provinces: in the course of the 17th century its population increased from 100,000 to 200,000 inhabitants. From Amsterdam, before 1600, the imported metal was exported to the Baltic and Mediterranean regions.¹² Much of the silver was imported in the form of ingots but above all in the form of crudely struck coins called pieces of 8, reals of 8 (*reales de a ocho*),¹³ pieces of 8 reals, Spanish piastres or mattes.¹⁴ Apart from the Spanish real, the most important silver coin of the peninsula, there were struck reals of Mexico and Peru, half-reals and pieces of 2 and 4 reals. The striking of 8 reals, planned from November 1537, had begun in the reign of Philip II.¹⁵ In the end production was essentially concentrated on the pieces of 8 reals¹⁶ and these circulated massively in the Northern and Southern Netherlands during the second half of the 16th century. The theoretical weight of the real was fixed by its size relative to the Cologne mark.¹⁷ Since this had a theoretical weight of 233 g,¹⁸ the real, struck 67 to the Mark, had a weight of 233/67 or 3.48 g.¹⁹ This is exactly the weight put forward by the twentieth century scholar Enno van Gelder.²⁰ This size was maintained throughout the reign of Philip III and in the first years of Philip IV, the 1620s.²¹ The theoretical weight of the 8 *reals* or *mattes* was 27.82 g.

The crude striking of the reals and their multiples and their very irregular shape made clipping easy. The weight was also reduced by wear. The regulations of the archdukes Albert and Isabelle therefore fixed minimum weights, below which they could not be circulated. The real had to weigh “2 *esterlins* or more,” i.e., at least 3.06 g.²² In 1611 the value was no longer set on the basis of a real but on the basis of a piece of 8 reals, the weight of which was given as: 17 *esterlins* and 25 *as* (with an allowed tolerance of 6 *as* [“*as*” is comparable to “grain,” see note 22—*Ed.*]),²³ i.e., a

weight of 27.22 g, equivalent to one ninth of a Troy mark.²⁴ It was considered that coins in circulation, having lost a little of their weight due to wear or clipping, should weigh at least 9 pieces to a mark of 245 g. There is no reason to think it was different in the United Provinces. A weight of 9 to the mark was easy to check and it is unlikely that the mark weighed more in Amsterdam than in the Southern Netherlands.²⁵

Towards the end of the 16th century and in the early years of the 17th century, the amount of American gold and silver imported was reduced due to the war with Spain. On the other hand, in the same period the demand for precious metals for the Asian trade, where Spanish reals were the most widely used and most sought after coins despite their rough appearance, increased markedly. Moreover, the export of mattes to Asia was very profitable. As a result, the amount of metal available for coin striking and monetary circulation in the Republic was meaningfully reduced.²⁶



Dordrecht: AR 8 reales, 1601, struck by the Compagnie Van Verre of Amsterdam for trade in the East Indies. Obverse: 1601 over crowned arms of the Province of Holland between four numeral ones sideways on each side (= value of 8), around it INSIGNIA • HOLLANDIAE •. Reverse: Crowned arms of Amsterdam, supported by lions, around it (rosette) ET CIVITATIS • AMSTELREDAMENSIS •. Ref.: Scholten 1, Dav.413, Delm.1206, Salvesen 11, KM 10. (Image courtesy of Goldberg Coins.)

The pieces of 8 reales shipped to Asia were greatly appreciated in India²⁷ and by the Javanese and the Malays, who called them *real batoe*. However, because of the war with Spain, the quantity of mattes sent was insufficient. In 1600 the *Compagnie Van Verre* (1594-1602) of Amsterdam asked the States of Holland for authorization to strike coins for the East Indies where supplies were inadequate. This was granted on March 1 1601, but on condition that the coins could not circulate in the Republic. The same year the Dordrecht mint issued six denominations in silver: pieces of 8 reales, halves of 4 reales, quarters of 2 reales, eighths of 1 real, sixteenths of a half real and thirty-seconds of a quarter of a real. The value of the real was fixed at the level of a *schelling* (escalin, shilling), the piece of 8 reales being then worth 8 *schellingen* or 48 stuivers.²⁸ The theoretical weight of the piece of 8 reales was very probably 1/9 of a mark, i.e., if we take the mark as 245 g, it is 27.22 g, the same weight as the matte in the Spanish Netherlands. The theoretical weight of the piece of 8 and its subdivisions would then be: 27.22g; 13.61 g; 6.81 g; 3.40 g; 1.70 g; 0.85 g.²⁹ It is very probable that the precious metal content was the same as that of the 8 Spanish reals, 0.931 or, for the stuiver, 0.5277 g of fine silver³⁰ (1 g of fine silver = 1.90 stuiver), while in the

Belgian provinces the piece of 8 reals was valued at 40 stuivers so that a stuiver was worth 0.6329 g of fine silver (1 g of fine silver = 1.58 stuiver). Priced 20% higher, the 8 reals of the Compagnie Van Verre obviously could not circulate in the Republic. They had to be shipped to the Indies where the exchange rate was 20% higher than in the Southern Netherlands.



Middelburg: AR 8 reales, 1602, struck by the Compagnie Van Verre of Middelburg (United Company of Zeeland) for trade in the East Indies Obverse: Garnished 9-field shield with the arms of the Nobility and Cities of Zeeland), around it (tower mm of Middelburg). MONE•ARG•ORDI•ZEELANDIAE• Reverse: 1602 over crowned arms of Zeeland dividing 8-R, around it •LVCTOR•ET•EMERGO• Ref.: Scholten 7, Dav.414, Delm.1209, KM 20. (Image courtesy of Geldmuseum, Utrecht)

In 1601 the two Zeeland companies trading with the Indies (*de Moucheron* and *Ten Haeff*) merged to form one single *Vereenigde Zeeuwsche Compagnie* (United Zeeland Company). Following the example of the Company of Amsterdam, the *Compagnie Van Verre* of Middelburg (Zeeland) requested similar permission to strike coins, which the States of Zeeland granted in a resolution of November 16th, 1601. The only coin struck under this concession was a piece of 8 reals dated 1602. The resolution states that the mintmaster Melchior Wyntges had agreed to supply silver to the Company to strike 1200 marks of 8 reals (*reaal van achten*) or 10800 pieces of 8.³¹ This number shows that these pieces were struck 9 to the mark and had a theoretical weight of $245 \text{ g}/9 = 27.22 \text{ g}$. The coin has on the obverse a nine-field shield with the arms of the nobility and the cities of Zeeland encircled by the legend MONE.ARG.ORDI.ZEELANDIAE (small tower) and on the reverse the crowned arms of Zeeland dividing 8-R, surrounded by the legend, LVCTOR.ET.EMERGO (I struggle and survive), with, above the crown, the date 16-02.³² With the same weight, the Zeeland 8 reals would certainly have had the same precious metal content as the pieces of 8 reals of the company of Amsterdam (27.22 g; 0.931) and the same value, 48 stuivers. The coins would certainly have been prohibited from circulating in the Republic.

At the beginning of the 17th century, silver was sent to the Indies in the form of 8 reals or mattes but, starting in 1602, the price of reals in the Republic increased so shipping them became less profitable. Apart from Spanish reals, South and East Asia also used gold ducats. Gold from the African possessions of Portugal, which had been united with Spain since 1580, was transformed into ducats in the mints of the

Republic but was then exported to the Baltic,³³ where the price was higher. In certain periods the amounts exported, issued by about ten well-equipped mints, were so large that the money circulating in the Republic was all foreign. The mints were therefore very dependent on the precious metals trade concentrated in Amsterdam.³⁴

With the exchange rate of the 8 reals having increased, the VOC tried to introduce other large silver coins into its trading posts. In 1615/16, the Amsterdam directors for the first time sent a strong-box of *leeuwendaalders* or lion daalders (4000 pieces), but it was not a success. The Chinese preferred to return home with silver coins or ingots rather than with ships filled with goods and demanded to be paid in silver for the products they sold. But they refused the lion daalders because they considered the alloy too low (0.750).

Jean Pieterszoon Coen, one of the first governors of the Company in the *Insulinde* (Islands of the East Indies), from 1617 to 1623 and from 1627 to 1629, requested that small silver money, escalins (*schellingen*) and double, single and half stuivers be sent out for the use of the VOC. In 1617 the directors of the Company at head office, known as The Seventeen Gentlemen (*Heeren Zeventien* or *Heeren XVII*), sent a first shipment: double and single stuivers equivalent to 14000 florins. After the foundation of Batavia³⁵ in 1619, a second shipment was sent out in 1622, also consisting of double and single stuivers, with a value of 40000 florins. In the following years small coins, also for trade, were sent out regularly.³⁶

Following the poor success of the lion daalders, the directors of the VOC in the Indies proposed to their counterparts at headquarters that ingots should be shipped out. In 1620 the Amsterdam directors sent out a first shipment of silver ingots, along with Spanish 8 real pieces and Netherlands coins,³⁷ gold ducats, lion daalders, rijksdaalders and schellingen which were put into circulation at an exchange rate fixed in Batavia. In addition to silver and gold coins, especially ducats, the VOC then regularly shipped gold and silver ingots to Asia.³⁸ As soon as they arrived in Batavia, the silver coins disappeared from circulation. The high value of silver meant that the rate for silver coins presented for exchange was regularly increased and they came to be considered objects of speculation. Bought at low prices, silver coins were then sold at higher prices.³⁹ Quantities of small silver coins were also imported. Put into circulation in bags of 300 florins, these bags of 300 florins could be used to pay larger sums. The public notice dated July 11, 1639, drew attention to the difference in the precious metal content of good Dutch money and small coins.⁴⁰ It was above all the large Netherlands silver coins that the natives hoarded to sell at a large profit when the Chinese junks arrived. Every measure was tried to prevent the exodus of the white metal; the exchange rate was raised, then reduced. These imprecise tariffs⁴¹ quickly gave rise to interminable disputes with the directors of the Company at head office who sometimes forbade the fixing of the exchange rates by the Batavia government and sometimes revoked their own orders or fixed the rates higher or lower.⁴² The Chinese took advantage of this by buying and exporting the best coins.

In 1625 the United Provinces began a long period of monetary stability during which the exchange rate of coins hardly changed,⁴³ but on March 18th, 1633, new general coin regulations decreed for the Belgian provinces by Philip IV increased the exchange rate of the 8 reals and its subdivisions. The Spanish 8 real, weighing 17 esterlins and 25 as (with a tolerance of 6 as), was raised to 2 florins and 8 patards or

48 sols (stuivers), with equivalent changes for the 4 and 2 real pieces. Reals of Mexico and Peru, with the same weight and tolerance, were given an exchange rate of 2 florins and 7 patards or 47 sols, again with equivalent changes for the 4 & 2 real pieces. The Spanish real weighing at least 2 esterlins would be worth 5 patards. In the Republic, the exchange rate of the matte was already 48 stuivers in 1626.⁴⁴ This increase in the exchange rate to 48 stuivers made more difficult profitable shipments of 8 reals to Batavia, where the real was also valued at 48 stuivers. On the other hand, the lion daalders, quoted at 40 stuivers since 1610, with a silver content of 20.76 g—the 8 reals with a weight of 27.22 g contained 25.33 g of fine silver—became a very attractive piece of merchandise to ship to Asia, where demand for silver remained strong. The lion daalders appeared in Batavia. Sent on to Surat and Siam,⁴⁵ they were much appreciated. In Batavia, the 8 real became less commonly used since its value was kept unchanged at 48 stuivers and “*real*” became a denomination for accounting purposes considered synonymous with 48 stuivers or 12 schellingen.

In Spain, on December 23rd, 1642, Philip IV decreed that the real would keep the same alloy but that new reals would be struck at 83 1/4 to the mark instead of 67 to the mark.⁴⁶ The theoretical weight of the new 8 real pieces was only 22.39 g.⁴⁷ These new provisions, reducing the weight by nearly 20%, increased the value of the silver mark (0.931) and silver coins by more than 24%. They were intended to reduce significantly the massive exports of gold and silver but were not effective because the foreigner or merchant who sold a product for a *real de a ocho* (a piece of 8 reals) now demanded 10 reals of the new money, which came to the same thing. Therefore, Philip IV quickly reversed himself, probably in 1643 or 1644, coming back to a higher weight for the real and its multiples, hardly lighter than before 1643.

It is probable that the arrival in 1643-44 in Batavia of these light reals of 22.39 g, containing only 20.84 g of fine silver⁴⁸ made the fine silver content of the real of 48 stuivers used in accounting fall to 20.84 g compared to 25.89 g before. Furthermore, the fine silver of the lion daalder was almost the same as that of the light real: $27.68 \text{ g} \times 0.750 = 20.76 \text{ g}$. The lion daalder now had the value of the accounting real of 48 stuivers. In any case, the lion daalder was very common in Batavia in 1645 and was called a *kroon* (*couronne*, crown). Scholten wrote that in 1645 “the *lion daalder* or *real kroon* represented the fictional accounting real.”⁴⁹

The lion daalder thus replaced the 8 real in Batavia as the coin representing the accounting denomination of the real of 48 stuiver, even though Philip IV already in 1643 or 1644 brought the weight back to close to what it had been before.⁵⁰ The increasing melting down of reals in the Spanish Netherlands favored the adoption of the lion daalder as the new base coin and coin of account, with an exchange rate of 1 real or 48 stuivers. Worth 40 stuivers in Amsterdam and 48 stuivers in Batavia, a 20% profit could be made from sending coins to the Indies.

The Issue of Silver Coins in Batavia, 1645

The massive melting down of mattes and their fractions had meaningfully reduced the amount of metal exported from the Belgian provinces to the United Provinces and from there to Batavia, which continued to severely lack silver coins. The profitable trade carried on with the merchants on the Chinese junks who visited Batavia required payment in silver coins because the Chinese continued to insist on payment

in cash for the goods they bought. Moreover, the natives hoarded large silver coins with the aim of reselling them at a higher price when the Chinese junks arrived. In a proclamation dated February 26th, 1645, the East Indies Company decided that a lot of countermarked Japanese silver ingots (*japans schuitzilver*)⁵¹ could be used to strike coins to fill their needs⁵² and meet the demand for large silver coins.

In 1645 the VOC thus had silver coins struck called crowns, half-crowns and quarter-crowns of Batavia, which circulated with a value of 48, 24 and 12 stuivers respectively.⁵³ The type was designed with a sword capped with two laurel branches crosswise and the Company's monogram in a crown. The legends consisted of the words "ANNO 1645 BATAVIAE" and the indication of value.

Since the Chinese did not appreciate the low grade alloy of the lion daalders, Batavia probably decided to issue coins with a greater silver content but with a lower weight. If the weight indicated in the public notice is correct (7/8 of a lion daalder),⁵⁴ the crown should have a weight of 24.22 g. To maintain the fine silver content of the real at the same level as the lion daalder, the precious metal content had to be higher than that of the lion daalder. Using an alloy of 6/7 or 0.857, the silver content would remain the same as that of the lion daalder and equally the value of the real: $27.68 \text{ g} \times (7/8) \times (6/7) = 27.68 \text{ g} \times 3/4 = 20.76 \text{ g}$. Numerous forgeries quickly appeared, probably due to a too low precious metal content since underweight coins could easily be spotted. The new coins were already ordered to be withdrawn from circulation on September 23rd, 1647.

Apart from the issue of light reals decreed by Philip IV towards the end of 1642, other important events certainly influenced the Batavia authorities. A large scale fraud had developed in Potosi. All the coins that were struck in the 1640s were below weight and made with a low grade alloy. After this great conspiracy was discovered, a strict check of all coins in circulation was instituted. Philip IV was obliged to issue a new coin regulation on October 2 1647, ordering the reduction in value of reals in the Spanish Netherlands to billon since "tests have shown that a large number of these pieces have been altered, forged or are unequal in weight or precious metal content: the evaluation and the selection have become impossible".⁵⁵ The change to billon (money to be melted down) was decreed for the pieces from Peru as well as the "parts of Spanish reals that were distributed among the people representing forty, twenty, ten, five and two-and-a half patards" under the proclamation of 1610. All coins that were too light had to be brought to the coin offices or attested money changers "to be given the value according to the tests that would be made."⁵⁶ These events probably contributed to the replacement in Batavia of mattes by lion daalders, with a stable weight and precious metal content, valued at 1 real or 48 stuivers.

In the mint workshops in the United Provinces, new silver coins were struck in quantity starting in 1659: the silver rider, officially called *zilveren rijder* with an exchange rate fixed at 63 stuivers,⁵⁷ and the silver ducat, called *zilveren dukaat* worth 50 stuivers. These pieces quickly came to be called *ducaton* and *rijksdaalder*. Their fine silver content was the same as that of the coins of the Spanish Netherlands.⁵⁸ Again, in 1659 the patagon (24.59 g of fine silver) was called a *Brabantsche rijksdaalder* and valued at 50 stuivers, the same as the *Nederlandse rijksdaalder* (25.69 g of fine silver) which then saw its value climb from 50 to 52 stuivers and continued to be exported to be used for payments at an exchange rate of 52 stuivers or

more.⁶⁰ The lion daalder moved from 40 to 42 stuivers and the stuiver correspondingly represented $27.68 \text{ g} \times 0.750/42 = 0.4943 \text{ g}$ of fine silver.

The new coins bore a large shield with the arms of the Union and a smaller shield with the provincial arms and similar legends to the 1606 issues, except that the word NOVA (new) was added to distinguish the new pieces from the heavier older ones.⁶¹ The continuation of the manufacture of the two old coins, the Nederlandse rijksdaalder (now also called *bankrijksdaalder*) and the lion daalder, was authorized and they continued for export purposes until the beginning of the 18th century. There thus existed a dual system of values and accounting, one based on the ducaton and the rijksdaalder for current circulation (*courant geld*) and another for exported coins based on the bankrijksdaalder and lion daalder (*bankgeld*). Until the French invasion of 1672, the two new coins were struck in great quantities and came partially to replace the ducats and patagons from the Southern Netherlands.

It was in 1670 that the VOC first asked to send ducats to the Indies.⁶² They were an immediate success: “the ducaton was the main coin put into circulation by the Company, especially in Batavia. Its value was fixed at 13 escalins or schellingen of 6 *sous* (stuivers), while in reality it was only worth 10-1/2 escalins! In this way the company made a profit of 2-1/2 escalins or 15 *sous* on each ducaton!”⁶³ or 23.8%. Valued at 13 schellingen or 78 stuivers, the exchange rate of the ducaton was going to be changed once again.

The exchange rate of the ducaton and the patagon had been maintained at 60 and 48 stuivers since they were first issued in the Spanish Netherlands in 1612 and 1618. On the other hand, the control by countermarks or weighing of reals of Spain as well as of Mexico and Peru was a failure and by an ordinance of February 8 1672 it was decided to prohibit the circulation of all reals, good and bad.⁶⁴ In the Spanish Netherlands the use of the reals of Spain, Mexico and Peru as coins thus came to an end. Henceforth the *real de a ocho* was only accepted as an ingot based on its precious metal content.⁶⁵

The Stamping of Rider Countermarks on Some Ducats and Half-Ducats in the Indies, 1686

In the Indies the exchange rate of the Dutch ducats struck since 1659 and those of the Spanish Netherlands was changed to 72 stuivers in Batavia from 1676, to the great dismay of the *Heeren XVII*. At the same time the pieces of 8 reals imported into Batavia from the Philippines by the Spaniards were equally valued at 60 stuivers or 10 schellingen.⁶⁶ Eight years later, in 1684, the exchange rate of the ducaton was reduced to 60 stuivers. This low rate quickly made them disappear from circulation and the VOC had to increase the rate again to prevent them all being exported.⁶⁷ These variations in exchange rates led to the need to countermark coins to give them a higher value. By a resolution of September 3, 1686, the VOC decided to have the ducats and half-ducatons of the Spanish Netherlands and of the Republic countermarked with a small rider on the left.⁶⁸ The countermark fixed the exchange rate at 12 escalins (schellingen) or 72 stuivers and 6 escalins or 36 stuivers respectively, while coins not countermarked were worth 66 stuivers and 33 stuivers respectively.⁶⁹ The circulation of two sorts of ducats was however forbidden by the *Heeren XVII*. The order concerning the stamping of countermarks was cancelled in

1692 and the countermarked coins were withdrawn from circulation the same year.⁷⁰ At the beginning the use of countermarks on coins seems to have been popular. In 1687 good Zeeland stuivers were also countermarked with a small lion next to their Zeeland arms, the mark serving simply to distinguish the good stuivers from the numerous forgeries in circulation.⁷¹

The lack of silver coins remained a crucial problem in the Indies. By a new decree of July 17th, 1693, the circulation of Indian coins stamped with a rider countermark was authorized.⁷² These silver rupees of Surat⁷³ had to be countermarked with a small rider on the left and circulated with a value of 28 stuivers.⁷⁴ Rupees without a countermark were worth only 4 schellingen or 24 stuivers.

Coin production for the *Compagnie Van Verre* of Amsterdam and for the Zeeland Company was a response to the lack of silver coins. When the enormous inflow of 8 real mattes stopped, they were replaced by lion daalders. A new shortage of silver coins gave rise to the issuance of crowns and half- and quarter-crowns by the VOC in 1645, which were withdrawn in 1647. Starting in 1670, the VOC requested the shipment of ducats, which met with immediate success. Their high precious metal content made them disappear as soon as they arrived. Changes in the exchange rate made no difference. The use of countermarks to raise the value of the ducat in 1684 was equally unsuccessful. The metal continued to be exported, above all to China.



Batavia: AR Batavia half crown or half real of 24 stuiver, 1645. Obverse: Pointed Sword in laurel wreath around it • BATAVIAE • (arabesque) • ANNO • 1645 • (arabesque). Reverse: Monogram of the (VOC) Company, above denomination 24 • ST •. Ref.: Scholten, 13; Verk., 200, 3; Mailliet, 13.2. 13.21 g. (Four specimens known.)



Batavia: AR half ducaton of Brabant, 1638, Brussels. Counterstamped with a rider facing left. Obverse: Bust of Philip IV right, counterstamp in field behind head. Reference Scholten, 15c (this specimen). 16.03 g. (Only specimen known.)

(The original version of this article first appeared in the catalog of Public Sale 99 of *Jean Elsen & ses Fils*, held in Brussels on March 28, 2009, where a rare Batavia 1645 half kroon of 24 stuivers and a unique 1638 Brabant half ducaton with the VOC rider countermark were offered. The article was translated from the French by Robert Ronus, with considerable assistance from the author, Jean Elsen.)

Notes

1. At the beginning of the 17th century, Holland was one of the most heavily populated regions of Europe and was by far the most influential of the seven provinces, whose inhabitants were all called *Hollandais* (Hollanders) by contemporaries, as still today. To avoid confusion between the inhabitants of all the provinces and those of the province of Holland, we prefer to use the terms *néerlandais* (people of the Netherlands), republic of the United Provinces or Republic. In the same way, following Jacques Pirenne, the southern provinces which were part of the Spanish Netherlands are called the *Belgian* provinces. This territory corresponded more or less with that of the Kingdom of Belgium and the Grand Duchy of Luxembourg, which were separated in 1830.
2. F. Braudel, *Civilisation matérielle, économie et capitalisme, XVe-XVIIIe siècle*, 3 vols, Paris, 1993 (1979 edition), vol.3: *Le temps du monde*, pp. 219-20. See also J.R. Bruijn, "Productivity, profitability and costs of private and corporate Dutch shipping. Some 17th and 18th century aspects," in J. Tracy (ed.), *Rise of Merchant Empires*, Cambridge and New York, 1989.
3. After Alexander Farnese took Antwerp in 1585, the number of exiles from the South, merchants and artisans bringing their capital with them, increased considerably, enriching the towns of Zeeland and Holland where they found refuge. During the period 1590-94 the percentage of new citizens coming from the Catholic and Spanish southern provinces was 80% in Leyden and 78% in Middelburg.
4. J.R. Bruijn, "Les Etats et leurs marines de la fin du XVIe à la fin du XVIIIe siècle" in P. Contamine (ed.), *Guerre et concurrence entre les Etats européens du XIVe au XVIIIe siècle*, Paris, 1998, pp. 83-121.
5. H.A. Enno van Gelder, *Histoire des Pays-Bas du XVIe siècle à nos jours*, Paris, 1936, p. 27.
6. F.S. Gaastra, *De geschiedenis van de VOC, Haarlem*, 1982, 2nd edition, Zutphen, 1991.
7. C.R. Boxer, *Jan Compagnie in oorlog en vrede, Beknopte geschiedenis van de VOC*, Bossum, 1977, English translation, *Jan Compagnie in war and peace, 1602-1799*, Hongkong, 1979.
8. G. Parker, *The Dutch Revolt*, London, 1977, p. 251; H. Hasquin. *Louis XIV face à l'Europe du Nord, L'absolutisme vaincu par les libertés*, Brussels, 2005, p. 27: "the immigrants coming from the south became the acquirer of 38% of the shares."
9. On the economic and financial history of the Republic and of the East Indies Company in the 17th century, see C. de Heer, *Bijdrage tot de financiële geschiedenis der Oost-Indische Compagnie*, 's-Gravenhage, 1929; M.A.P. Meilink-Roelofs, *Asian Trade and European Influence*, The Hague, 1962; H. de Haan, *Moedernegotie en grote vaart. Een studie over de expansie van het Hollandse handelskapitaal in de 16e en 17e eeuw*, Amsterdam, 1977; J.H. van Stuijvenberg (ed.), *De economische geschiedenis van Nederland*, Groningen, 1979; L. Blusse & F.S. Gaastra, *Companies and trade. Essays on overseas trading companies during the Ancient Regime*, The Hague, 1981; M. Aymard, *Dutch capitalism and world capitalism. Capitalisme hollandais et capitalisme mondial*, Cambridge and Paris, 1982; W. Smith, "The European-Asian trade of the seventeenth century and the modernization of

- commercial capitalism” in *Itinerario*, 6, 2, 1982, pp. 68-90; C.R. Boxer, *The Dutch seaborne empire: 1600-1800*, London, 1965; Dutch translation: *Het profijt van de macht. De republiek en haar overzeese expansie, 1600-1800*, Amsterdam, 1988; J. Israel, *Dutch primacy in world trade, 1585-1740*, Oxford, 1989, 3rd edition, Oxford-New York, 1991, Dutch translation *Nederland als centrum van de wereldhandel, 1585-1740*, Franeker, 1991; M.C. 'T Hart, J.L. van Zanden & J. Jonker, *A financial history of the Netherlands*, Cambridge, 1997; D. Ormrod, *The rise of commercial empires. England and the Netherlands in the age of mercantilism. 1650-1750*, Cambridge, 2003.
10. C.H.H. Wake, “The changing pattern of Europe’s pepper and spice imports, ca. 1400-1700,” in *The Journal of European Economy* 8, 1979, pp. 361-403; J. Israel, *Conflicts of empires: Spain, the Low Countries and the struggle for world supremacy, 1585-1713*, London-Rio Grande, 1997.
 11. J.G. van Dillen, *De Opstand en het Amerikaanse zilver*, in *Mensen en achtergronden*, Groningen, 1964; J. Israel, *The Dutch Republic and the Hispanic World, 1606-1661*, Oxford, 1982; M. Morineau, *Incroyables gazettes et fabuleux métaux. Les retours des trésors américains d’après les gazettes hollandaises (XVIe-XVIIIe siècle)*, Paris-Cambridge, 1983; F.S. Gaastra, “The export of precious metal from Europe to Asia by the Dutch East India Company, 1602-1795” in J.F. Richards (ed.), *Metals in the Later Medieval and Early Modern World*, Durham, 1983, pp. 447-76.
 12. J.G. van Dillen, *Amsterdam marché monétaire des métaux précieux au XVIIe et au XVIIIe siècles* in *Revue historique*, 152, 1926, pp.194-201; J.G. van Dillen, “Amsterdam als wereldmarkt der edele metalen”, in *Economisch-historische herdrukken*, 's-Gravenhage, 1964; G. Mak, Amsterdam, 1999.
 13. On the “pieces of 8,” see T. Dasi, *Estudio de los reales de a ocho*, 5 vols, Valencia, 1950-1951 (volume 2); J. De Yriarte, *Catalogo de los reales de a ocho*, Madrid, 1955.
 14. In the New World and Spain, these coins were called *duros* or *macuquinas*, in the United Provinces, *8-reaalstukken* or *8-realenstukken*, *stukken van achten*, *spaansche matten* or *Spaanse matten*. In the 17th century the pieces of 8 reals with the columns of Hercules struck in Latin America were commonly called *pilaer* (pillars) in the Republic. The Spaanse matten were immortalized by the popular song in praise of the Dutch privateer Piet Heyn “whose name is small but whose acts are big” and who captured the “Zilvervloot” (the silver fleet) with many pieces of 8 on board (“*Die had er veel Spaansche matten aan boord*”).
 15. M. Hoc, “*Le cours et le marquage des réaux d’Espagne et de Mexique aux Pays-Bas*” in *Revue Belge de Numismatique*, 1960, pp. 285-94 and especially p. 286 and note 2.
 16. A fifth (the *quinto real*) of all the production of precious metals went to the Spanish Crown who fixed the weight and precious metal content of coins. J.R. Lasser & J.E. Restrepo, *The cob coinage of Colombia*, New York, 2000, pp. xv-xvi.
 17. The theoretical weight of the real was determined by the measure of 67 to the Cologne mark. This mark had been used in the Iberian Peninsula since the Middle Ages. Castile was already using the Cologne mark in the 13th century. F. Mateu Y Llopis, *Catalogo de los ponderales monetarios del museo arqueologico nacional*, Madrid, 1934, pp. 31 & 33. A 1344 document indicates that two marks were important in Spain, the Cologne mark and the Troyes mark: “*dos Marcos, el uno de la Ciudad de Colonia de Alemania, y el otro de la Ciudad de Troya o Troyers de la Provincia de Campana en el Reyno de Francia.*” J. Garcia Caballero, *Breve Cotejo y Balance de la pesas y medidas de varias naciones, reynos y provincias, comparadas y reducidas a las que corren en estos Reynos de Castilla*, Madrid, 1731, cited by J. Pellicer I Bru, *Repertorio metrologico medieval de los reinos hispanicas*, Barcelona-Madrid, 1999, p. 134. This utilization of the Cologne marc is confirmed by a royal ordinance of 1348 concerning marks, reissued under Philip II: “*...ordenamos y mandamos, que en todas las ciudades y villas y lugares de nuestros reynos, los pesos y medidas sean todos unos en la forma siguiente: que el oro y la plata y vellon de moneda, que se pese por el marco de Colonia, que aya en el ocho oncas...* (we order and command that in all the cities, towns and places in our kingdoms, the weights and measures be in the

following form: that the gold and silver and billon money be weighed in relation to the Cologne mark, which is divided into eight ounces),” cited by F. Mateu Y Llopis, *Catalogo de los ponderales monetarios*, p. 44. In Spain and in the colonies the theoretical weight and precious metal content of the piece of 8 reals and its subdivisions were strictly respected. On November 23 1566, Philip II ordered escudos and double escudos of 22 carats (0.917) to be struck, the weight of the escudo being fixed at 68 to the mark. The ordinance also stipulated the striking of reals, double reals and 4 reals with a precious metal content of 11 deniers 4 grains (0.9306) struck 67 to the mark: “*escudos sencillos, i dobles de oro de lei de veinte i dos quilates, i de sesanta i ocho piezas de escudos sencillos por marco, que es conforma a la lei i peso que los escudos que el Emperador, i Rei, mi Senor labro, tienen, i que ansimesmo se labren reales sencillos, dobles, i de a quatro de lei de once dineros, i quatro granos, i de sesenta i siete reales por marco que son de la misma lei*” (single and double gold escudos of 22 carats, with 68 pieces of a single escudo to the mark, which conforms with the fineness and weight that the Emperor, the King, my Lord maintain, and at the same time strike single, double and four real pieces of 11 deniers and 4 grains fine, with 67 reals to the mark, which are of the same fineness). Cited by A. Heiss, *Descripcion General de la monedas hispano-christianas desde la invasion de los Arabes*, I, Madrid, 1865, reprint, Saragossa, 1962, p. 161.

18. Given the degree of uncertainty, which for a very long time remained at about 1%, of the mass of weights, of weighing, of the lengths of arms of scales, it made no sense to try to fix the theoretical mass of the Cologne mark in decigrams or centigrams. The theoretical weight of the Roman pound was thus 326 g, that of the Troyes mark 245 g and that of the Cologne mark 233 g. L. Blancard, *Sur les poids des anciennes provinces belges in Revue belge de numismatique*, 1898, pp. 62-65. Already in 1986 Ghyssens wrote: “As L. Blancard, based on the work of Pegolotti, has shown, the Cologne mark was already given a weight of about 233 g at the beginning of the 14th century. Pegalotti stated clearly that the Bruges gold mark, which is identical to the Paris mark, was equivalent in London to 8 ounces 8 esterlins at the Tower weight, or 168/160 or 21/20. As the London and Cologne marks are identical, they both weigh 20/21 of 244.7529 g or 233.098 g.” J. Ghyssens, “Quelques mesures de poids du moyen âge pour l’or et l’argent,” in *Revue belge de numismatique*, 1986, pp. 55-82 and in particular pp. 69-70. We say 20/21 of the theoretical weight of the Bruges mark, equivalent to the Troyes mark (245 g) or, rounding to the nearest gram, a theoretical weight of 233 g. That was the Cologne mark, the Tower of London mark (the coiner’s mark), and the marks of Montpellier, Barcelona, Spain and Portugal. On the other hand, the pound of the Tower of London weighed 350 g and was divided into 12 ounces. The mark equivalent to 8 oz. therefore weighed $350 \text{ g} \times 8/12 = 233 \text{ g}$. At the beginning of the 16th century the Cologne mark weighed 4800 grains in Spain. This grain ($233 \text{ g}/4800 = 0.04854 \text{ g}$) was probably a grain of hulled barley.
19. The theoretical weight of the gold escudo was consequently $233 \text{ g}/68 = 3.43 \text{ g}$ and that of the piece of 8 silver reals $8 \times 233 \text{ g}/67 = 27.82 \text{ g}$.
20. H. Enno van Gelder, *De Nederlandse munten*, Utrecht-Antwerp, 1972, p. 267.
21. The silver real and its multiples, the pieces of 8, 4, 2 and 1/2 reals continued to be issued in Spain and in America with the same precious metal content and with a weight of 67 reals to the mark: “the silver coins that were made in the first years of the reign of Philip IV were at 11 deniers and 4 grains fine (931 *milesimos*). 67 silver reals were made from one mark and from this 8, 4, 2, 1 and 1/2 silver reals were issued in Spain and America.” A. Heiss, *Descripción General*, p. 186.
22. The Troy mark (245 g) was divided into 160 esterlins (1.53 g) of 32 grains and thus weighed 5120 grains or *as* (in Dutch, *greinen* or *azen*). Concerning the Troy mark with a theoretical weight of 245 g, see O. Elsen, “La monnaie des comtes de Flandre Louis de Nevers (1322-1346) et Louis de Male (1346-1384) d’après les comptes et ordonnances monétaires,” in *Revue belge de numismatique*, 141, 1995, pp.37-183, p.14 and note 14.
23. M. Hoc. *Le cours et le marquage des réaux d’Espagne*, p. 287.

24. 17 *esterlins* 25 *as* are equivalent to $17 \times 32 + 25 = 569$ *as*. A weight of 9 to the mark of 5120 *as* gives $5120/9 = 568.89$ *as*.
25. *The Dormant du Véritable Poids de Troyes* (The Fixed Form of the True Troyes Weight) kept at the Brussels mint disappeared during the French invasion of 1794. Ghysens recalled that "...the standard of the Zeeland mark is kept in the Museum of Utrecht. This 16 mark standard dates from 1612 and has been adjusted to the Holland standard, which itself has been made to conform to the Brussels weight in 1553/54. The pound coming from this weight weighed 492.008 g in 1827." J.Ghyssens, *Quelques mesures de poids du moyen âge pour l'or et l'argent*, p. 57. The difference between 246 and 245 g is only 0.4%, less than the margin of error at the time.
26. In Holland the striking of the *Unie Rijksdaalder* (Delm. 900; 29.24 g; 0.888; 25.97 g fine silver) took place only in 1595, after the striking of the *Prinsendaalder* (Delm. 921; 29.03 g; 0.885; 25.69 g fine silver), stopped in 1592, then restruck in 1600-1602. The production of *daalders* only started again in 1606 with the *Nederlandse Rijksdaalder* (Delm. 939; 29.03 g; 0.885; 20.76 g fine silver) on the same conditions as the *Prinsendaalder* of 1592 and 1602 and lasted until 1693 without any change in its fine silver content. The production of the *lion daalder*, the *leeuwendaalder* (Delm. 831; 27.68 g; 0.750; 20.76 g fine silver, and then, from 1606, Delm. 832; 27.68 g; 0.750; 20.76 g fine silver) continued without interruption on the same conditions for the whole of the seventeenth century. In Zeeland the production of the same types was very similar to that of Holland. Delm. = A. Delmonte, *Le Benelux d'Argent*, Amsterdam, 1967.
27. In the Indies the 8 real was called the *ringgit*. The Chinese who exported many coins from the Indies for re-melting particularly appreciated the precious metal content of the reals. J.E. Ter Gouw, "De Munt in de volkstaal," in *Tijdschrift van het Koninklijk Nederlandsch Genootschap voor munt-en penningkunde*, 1906, pp. 191-217 and in particular pp. 194 & 197.
28. A. Engel & R. Serrure, *Traité de numismatique moderne et contemporaine*, Paris, 1897, p. 587; J.E. Ter Gouw, *De munt in de volkstaal*, pp. 193-194; C. Scholten. *De munten van de Nederlandsche gebiedsdeelen overzee, 1601-1948*, Amsterdam, 1951, (English translation: *The Coins of the Dutch Overseas Territories, 1601-1648*, Amsterdam, 1953) p. 32, 1-6. The real or *schelling* was worth 6 stuivers or 48 *duiten*.
29. The weights of a series of 6 coins sold in 2005, Jean Elsen et ses Fils s.a., public sale 84, 18 June 2005, lot 1833 are: 27.13 g, 13.54 g, 6.79 g, 3.37 g, 1.70 g and 0.77 g. They confirm the proposed proportion of 9 to the Troyes mark and show with what great precision the strikes were made.
30. $(245 \text{ g}/9) \times 0.931/48 = 0.5277$ g.
31. C. Scholten, *De Munten van de Nederlandsche gebiedsdeelen overzee*, p. 32.
32. —, *De Munten van de Nederlandsche gebiedsdeelen overzee*, p. 32, 7.
33. V. Magalhaes Godhino, *L'économie de l'empire portugais au XVe et XVIe siècles*, Paris, 1969. While gold was preferred in the Baltic region, silver was more appreciated in Asia.
34. J.G. van Dillen, *Amsterdam marché monétaire des métaux précieux*, pp.194-201.
35. Batavia is the old name of what is now Jakarta, the capital of Indonesia.
36. B. van Beek, "VOC numismatiek," in *De Beeldenaar*, 9, 5, September-November 1985, pp. 149-157, especially p. 153.
37. A. Pol, "Baren voor Bengalen. De produktie van staafzilver ten behoeve van de VOC," in *De Beeldenaar*, 1987, pp. 208-212 and especially p. 208.
38. F.S. Gaastra, "The exports of precious metal from Europe to Asia by the Dutch East India Company, 1602-1795," in J.F. Richards (ed.), *Precious metals in the Later Medieval and Early Modern World*, Durham, 1983, pp. 447-76.
39. M. de Man, "Gestempelde Soeratsche ropijen," in *Tijdschrift van het Koninklijk Nederlandsch Genootschap voor munt-en penningkunde*, 1905, pp. 286-97 and in particular p. 286, cites Dapper, *Asia of nauwkeurige beschrijving van het Rijk des Grooten Mogols*, Amsterdam, 1672, p. 186, who wrote that "many Bengalis run an exchange business with great profit, since they purchase gold and silver from the arriving Dutch and English ships

- from Europe when they are at their lowest prices: and increase afterwards the exchange rate when the money is transported to places inside the country. All the gold and silver, minted into coin or not, brought from other countries, is melted down and struck into coins with Persian letters concerning the name and the dignity of the king.”
40. “...the valuable alloy of the Dutch coins and their low or modest valuation compared to the foreign coins circulating at the same value...” E. Netscher & J.A. van Der Chijs, *De Munten van nederlandsch-indie beschreven en afgebeeld*, Batavia, 1863, p. 20, cited by M. de Man, *Gestempelde Soeratsche ropijen*, p. 287.
 41. To give an example, the rijksdaalders were worth 50 stuivers or 2-1/2 florins since 1610 but in the Indies the rate was 48 stuivers: “although the *risdale*, equivalent to 50 sous in Europe and to only 48 sous in the Indies, was generally used in private commercial transactions.” M. Nahuys, “Numismatique des Indes néerlandaises,” in *Revue Belge de Numismatique*, 1887, pp. 230-40 and pp. 501-14 and especially p. 503.
 42. M. de Man, *Gestempelde Soeratsche ropijen*, pp. 288-91.
 43. H. Enno van Gelder, *De Nederlandse munten*, p. 104.
 44. In the journal kept in Dordrecht by Maria van den Corput, the aunt of Johan de Witt, she mentions in 1626 a *Spaensche mat* at a rate of 2- 8, i.e., 2 florins 8 stuivers (8 schellingen). J.E. Ter Gouw, *De munt in de volkstaal*, p. 198.
 45. B. van Beek, *VOC numismatiek*, p. 153.
 46. The king ordered “*que, de aqui adelante, del marco de plata de ley de once dineros y cuatro granos, del qual se labraran sesenta y siete reales...se labren y saquen ochenta y tres reales y un quartillo*” (that, from here on, from the silver mark of 11 deniers and 4 grains fine from which sixty-seven reals have been produced...will be struck eighty-three and a quarter reals). Cited by A. Heiss, *Descripción General*, p. 186; F. Matheu Y Llopis, *Catalogo de los ponderales monetarios*, p. 125.
 47. The real being struck at 83-1/4 to the Cologne mark (233 g), and the multiples proportionally, the theoretical weight of the piece of 8 reals is $(233 \text{ g}/83.25) \times 8 = 22.39 \text{ g}$.
 48. $8 \times (233\text{g}/83.25) \times 0.93055 = 20.84 \text{ g}$ of fine silver, the alloy being unchanged (0.931).
 49. C. Scholten, *Die munten van de Nederlandsche gebiedsdeelen overzee*, p. 35: “It seems that from the year 1645 the Lion daalder, or crown, weighing 18 engels = 27.684 g was considered the real coin representing the imaginary Real (money of account).” Scholten assumed 246.08 g as the weight of the Troyes mark and thus obtained the weight of the lion daalder: $18 \times (246.08 \text{ g}/160) = 27.684 \text{ g}$.
 50. In the Spanish Netherlands, under the ordinance of February 1644, reals and their multiples and fractions with the correct weight (at least 9 to the mark for the piece of 8 reals) were kept at the exchange rates which had been fixed on March 18th, 1633, to wit 8 reals for 48 stuivers, 4 reals for 24 stuivers, 2 reals for 12 stuivers, 1 real at 6 stuivers or 1 schelling (escalin or shilling) and a half-real for 3 stuivers or a half schelling. This decree increased the exchange rate for gold coins; that of silver coins remained unchanged: the patagon kept its value of 48 stuivers and the ducaton remained at 60 stuivers.
 51. E. Netscher & J.A van Der Chuis, *De munten van Nederlandsch-Indie*, p. 24; M. de Man, *Gestempelde Soeratsche ropijen*, p. 290.
 52. “...to be produced from the available Japanese silver bars...as many crowns of Batavia as necessary to satisfy our needs by the citizen and goldsmith Jan Ferman and the Chinaman Konjok.” Cited by C. Scholten. *Die munten van de Nederlandsche gebiedsdeelen overzee*, p. 35.
 53. These pieces are of the highest rarity. In 1993 L. Schulman knew three examples of the piece of 24 stuivers: one example in the *Nederlandse Bank* collection, one example in the collection of the *Museum van Land-en Volkenkunde*, the third example in his sale 10 on April 5-6, lot 407. This last one was offered in sale 99 of *Jean Elsen & ses Fils*, March 28th, 2009, lot 2760 (13.21 g). A fourth example appeared in *Baldwin's* sale 48, September 26th, 2006, lot 5081.

54. The public notice of February 2nd, 1645 mentioned "...at the correct weight of 7/8 real or lion daalder." Cited by C. Scholten, *Die munten van de Nederlandsche gebiedsdeelen overzee*, p. 35. The weight of the half-crown in the Lasser collection is 13.22 g.
55. M. Hoc, *Le cours et le marquage des réaux d'Espagne*, p. 289.
56. Cited by M. Hoc, *Le cours et le marquage des réaux d'Espagne*, p. 289. Still on April 10th, 1648 Philip IV decided to permit temporarily the circulation of whole reals, with the correct weight, and to "*exposer et recevoir lesdicts réaux de huit appelez mattes, pourveu qu'en ce faisant ils soient de faict pesez et trouvez estre de juste poids*" (to offer and receive the so-called reals of 8, called mattes, provided that they are weighed and found to be of the correct weight), all the others (too light) remained to be turned into billon and had to be brought to the Mint.
57. The exchange rate at which the ducats from the Belgian provinces circulated was officially recognized in the Republic after a long resistance to their circulation. Already in 1634 the quantity of ducats imported from the Southern Netherlands into the United Provinces was such that the States General of the Republic felt obliged to publish an announcement on March 17th, 1634 declaring the southern ducats billon: "We understand that here in the country are daily imported from Brabant certain silver coins named ducats, struck and valued there at three guilders or sixty stuivers, against which already in 1619 a public notice was posted declaring them billon and that these coins are forced into our country at a rate of 63 stuivers, that is at least three stuivers above their value relative to our Rijksdaalder valued at 50 stuivers. There is no doubt that in a matter of time these coins will be imported in such quantities that our provinces will be full of them, causing enormous damage to our good inhabitants and advantage to those on the other side." Cited by J.E. Ter Gouw, *De munt in de volkstaal*, pp. 212-13.
58. The Philip IV ducat contained $32.48 \text{ g} \times 0.944 = 30.66 \text{ g}$ of fine silver. The rider ducat $32.78 \text{ g} \times 0.941 = 30.85 \text{ g}$. The patagon contained $28.10 \text{ g} \times 0.875 = 24.59 \text{ g}$ of fine silver, the silver ducat $28.25 \text{ g} \times 0.873 = 24.66 \text{ g}$. The slight difference is in part due to the adoption of a weight of 246 g for the Troyes mark in the Republic. The difference between 246 g and 245 g is 0.4%.
59. Delm. 939; 29.03 g, 0.885; 25.69 g of fine silver; 1 stuiver = 0.5138 g of fine silver.
60. H. Enno van Gelder, *De Nederlandse munten*, p. 220. The stuiver was then worth $29.03 \text{ g} \times 0.885/52 = 0.4941 \text{ g}$ of fine silver and 1 g of fine silver = 2.02 stuivers while, for the patagon, 1 stuiver was worth $28.10 \text{ g} \times 0.875/50 = 0.4918 \text{ g}$ and 1 g of fine silver = 2.03 stuiver.
61. H. Enno van Gelder, *De Nederlandse munten*, pp. 131-32.
62. B. van Beek, *VOC numismatiek*, p. 153.
63. M. Nahuys, *Numismatique des Indes néerlandaises*, p. 503.
64. "...nous avons trouvé convenir de billonner et billonnons par cestes généralement toutes lesdictes mattes, tant d' Espagne que de Portugal, Mexico, Peru, voulans et ordonnans que doit le jour de la publication de la présente, personne les pourra présenter, bailler ou recevoir à quelque priz que ce soit, soubz les peines statuées au regard des aultres especes de billon." (...we have found it advisable to billon (i.e., melt down) and we will billon by these orders generally all the so-called mattes, from Spain as from Portugal, Mexico, Peru we wish and order that from the day of the publication of the present order, no one will be able to present them, deliver them nor receive them at whatever price, under the statutory penalties applicable to other kinds of billon...), cited by M. Hoc, *Le cours et le marquage des reaux d'Espagne*, p. 292. If Spanish merchants kept sending mattes, the entry of these mattes was authorized "*par nos ports et bouches de mer, et non par d'autres voie*"s (through our ports and outlets to the sea, but not by other routes) but it was forbidden to put them into circulation. These reals had to be brought to the Mints to be converted into coins with the stamps and arms of the king, and this requirement was equally valid, within a period of six weeks, for all mattes which were in the country.
65. Finally, orders of Charles II on November 18th, 1679, November 4th, 1683 and February 18th, 1687 authorized the free entry of mattes as well as gold and silver ingots, exclusively

- by ports and outlets to the sea, and their free exit. M. Hoc, *Le cours et le marquage des réaux d’Espagne*, pp. 292-93.
66. M. Nahuys, *Numismatique des Indes néerlandaises*, p. 503, did not mention in which period the pieces of 8 were valued at 60 stuivers. However, the fine silver content of the ducaton being 30.85 g and that of the stuiver $30.85 \text{ g}/72 = 0.4284 \text{ g}$, the silver content of the real at a rate of 60 stuivers is $27.22 \text{ g} \times 0.93055/60 = 0.4222 \text{ g}$. The two rates were contemporaneous.
 67. The ordinance prescribed to do “*alles om het groot geld hier ter stede te houden*” (everything to keep the large coins in our city). M. de Man, *Gestempelde Soeratsche ropijen*, p. 290.
 68. The ordinance stipulated that the coins should be “punched with a special mark of a horseman riding to the left.” E. Netscher & J.A. van Der Chijs, *De Munten van Nederlandsch-Indie*, p. 39; M. de Man, *Gestempelde Soeratsche ropijen*, p. 291; C. Scholten. *Die munten van de Nederlandsche gebiedsdeelen overzee*, p. 36.
 69. Two weeks earlier, on August 20th, 1686 it was decided that 20000 ducats of the Republic, in the possession of the VOC, would be counterstamped with the letter B (= Batavia) to prevent similar ducats being put into circulation by private individuals. 70000 pieces were then imported, which were withdrawn from circulation in 1690. M. Nahuys, *Numismatique des Indes néerlandaises*, pp. 233 & 236; H.V. Codrington, *Ceylon coins and currency. Memoirs of the Colombo Museum*, Colombo, 1924.
 70. There remain extremely few countermarked ducats and half-ducatons. A Philip IV half-ducaton, struck in Brussels for Brabant in 1638, countermarked with a horseman facing left, was found in the collection of the *Bataviaasch Genootschap*, then in the sale catalogue of the Stephanik collection in 1904, lot 6442 (de Witte no. 1023). M. de Man, *Gestempelde Soeratsche ropijen*, p. 290, n.1. In that sale it was bought by Moquette. This coin was later sold by Jacques Schulman, Auction 289, March 7-8, 1989, and then offered for sale by Jean Elsen & ses Fils in their sale 99, March 28th, 2009, lot 2761.
 71. E. Netscher & J.A. van Der Chijs, *De Munten van Nederlandsch-Indie*, p. 40; M. de Man, *Gestempelde Soeratsche ropijen*, p. 291.
 72. M. Nahuys, *Numismatique des Indes néerlandaises*, p. 236. It concerned rupees of Surat of which Dapper spoke in these terms in 1672: “The *ropias*, or *rukie*, *rupias* and *rupias chagamy* valued at 24 Holland stuivers are of good composition and circulate in the whole Surat area. The *mamoedys*, another silver coin valued at ten and a half stuivers, is struck at Surat from bad silver and are allowed to circulate in only a few towns.” Dapper, *Asia of nauwkeurige beschrijving van het Rijk des Grooten Mogols*, Amsterdam, 1672, cited by M. de Man, *Gestempelde Soeratsche ropijen*, p. 296.
 73. The countermarked rupees were struck by Aurangzib (1659-1707).
 74. The heading of the ordinance is: “Notification concerning the acceptance into circulation of the silver rupees of Surat at the value of 28 heavy stuivers.” With regard to the countermark, the order states: “To prevent all sinister practices or other wrong machinations, it was agreed, in the presence of two delegates, one of the honorable Department of Justice, the other a bourgeois from the Respectable College of Aldermen, that the silver rupees would be noted and their obverse countermarked with the mark of a little horseman riding to the left.” Cited by M. de Man, *Gestempelde Soeratsche ropijen*, p. 296.

The First Silver Coin Minted in Brazil

Alberto Paashaus

The Dutch were the first to mint coins within Brazilian territory. They minted the first gold coins and also the first silver coin, the very rare 12 *stuiver*.

The 12 *stuiver* coins are among the rarest in the Brazilian arena, with no more than five authentic pieces having survived. These small square coins are the subject of a lot of controversy and mystery; not much has been written about them, since the gold coins from the Dutch Invasion always draw more attention from collectors.

On 26 January 1654, the Dutch rule ended in Northeast Brazil after 24 years of occupation. This occurred with the signing of the accord of *Campina do Taborda*,¹ in which the High and Secret Council of the West Indies Company in Recife surrendered to General Francisco Barreto de Menezes, Governor of the Province of Pernambuco.

The situation was chaotic. The invasion, which was initially peaceful and accepted by the residents, moved in different directions with the departure of Count Maurice of Nassau back to the Netherlands in 1644. In 1645 the *Insurreição Pernambucana*² broke out and then the Dutch administration in Brazil had to spend substantial sums of money to maintain its position in the territory. In 1645 and 1646 the first issue of gold coins was made for the purpose of paying the troops; the coins were issued with a premium of 20% over the gold melt value, in hopes of keeping them in the occupied territory. Their face values were 3, 6 and 12 gulden and these are the first coins ever minted in Brazil.

In 1654, with the surrender of the Dutch, Portugal regained the Brazilian Northeast, the most important colonial region for Portugal at that time because of its sugar cane production. Once again, with empty coffers, the West Indies Company had to resort to the issuance of currency for the payment of the mercenary soldiers. Thus, on the very same day of surrender, the General Accountant Jacob Aldrichs explained to the High and Secret Council about the lack of money, and recommended the coinage of silver coins which should be later redeemed with the Company.

Since there was no silver to work with, General Schoonenborch, Governor of Pernambuco under the West Indies Company, and a director named Haecx offered their silverware, along with more than 23 pounds of silver arranged by Aldrichs. The silver was delivered to Hendryck Bruynsvelt to mint coins of 2 gulden (8 engels), 1 gulden (4 engels) and 10 *stuiver* (2 engels), as shown by the records made on the day of surrender.³

¹ Campina do Taborda, or Taborda Hill, was the place where the Dutch and the Portuguese troops had their final battle before the Dutch surrender.

² A series of upheavals started in June 3rd, 1645. The *Insurreição Pernambucana* (Insurrection of Pernambuco) was the first attempt to expel the Dutch invaders from the territory.

³ *Notulen van den Hoogen en Secreten Raad in Brazilië*, 26.1.1654. This document is part of a series of records of the West Indies Company in Recife at that time.

Old Dutch text reworked for clarity

Den Ontfanger Generael Jacob Alrichs hebbende vertoont, dat de Cassa t'eenemael ten eynde was ende dat selffs de kleynste schulden niet conden betaelt worden: heeft men in deliberatie gelecht, off niet van gemaect Silver eenige penningen soudén connen werden geslagen om bij dese extremitéyt uyt te geeven, die daernaer wederom soudén worden vergoet, waertoe de heeren Schoonenborch ende Houcx hebben geprofileert te geven het weynige Silverwercke van haere mesnage sonder daer omtrent van yemant gevolcht. Ja niettemin tot een begin daertoe genomen. Drieentwintich pont silver, die bij den Ontfanger Generael sijn verschaft, 't welck bij de heer Henrick Brunsvelt verwerckt sal worden, die daervan sal slaen viercante stucken, te weten een stuck van acht Engelsén, 't welck gaen sal tot twee gulden, een van vier Engelsén tot eene gulden, een van twee Engelsén tot tien stuivers.

English translation

The Receiver General Jacob Alrichs has ascertained that the money box was empty and that even the smallest debts could not be paid. They have considered whether it is possible to use silver [objects] for coinage to use as money in this extreme case. Afterwards these coins will be replaced for good coinage [good money, good current coins, etc.]. The gentlemen Schoonborch and Houcx have offered the silver from their household without being followed by others [nobody else did the same]. Yes, not even one took action. Twenty three pounds of silver, rendered by the Receiver General, will be used by Mr. Henrick Brunsvelt to strike square pieces, namely one piece of eight "Engelsén" [grain; as a weight], which will be valuable for two gulden, one of four "Engelsén" to one gulden, one of two "Engelsén" to ten stuiver.

The minting period, however, was brief, as on 31 January 1654, just six days after being authorized, Barreto de Menezes ordered that the coinage of silver by the Dutch be suspended.

The authorized values in the WIC (*Geoctroyeerde Westindische Compagnie* [Chartered West India Company]) minutes for this silver issue are quite controversial, since none of the face values mentioned have been found. It has been speculated that there would not be enough silver to mint those values and thus some restraints must have been placed in order to meet the payments due the soldiers.

Prober, seeking to understand why an unauthorized value was created, pondered two plausible possibilities.

- A) The coins have been minted according to the *Löwenthaler* system, which corresponds to the coin weight and value.
- B) The pieces were minted with representative values of 12 gulden that would be later redeemed at face value in gold gulden.

The earliest reference to the silver 12 stuiver was made by Gerard van Loon in the second volume of his monumental work *Beschryving der Nederlandsche*

Historipenningen in 1726. Unfortunately, Van Loon only describes the coin, without giving many references on its origin.



Figure 2
Drawing of the 12 stuiver coin in the second volume of the *Beschryving der Nederlandsche Historipenningen*.
(Van Loon, 1726)

The second reference we find in the literature of the 12 stuiver coin is in the book *Historia das Lutas com os Holandezes no Brazil*, by Francisco Varnhagem, published in Vienna in 1871. The engraving titled "*Esboço do Littoral do Brazil*" brings the Dutch gold coins together with the silver 12 stuiver of 1654 (apparently, the drawings are based on Van Loon's work).

In the reference books we were able to find that the coin of 12 stuiver is 917/1000 of silver finesses (Dessart, 1960), and that specimens weigh about 5 grams (Schulman, 1970; Meili 1897). The shape of the coin is rhomboidal, with approximately 25 mm on each side (Silva Ramos, 1900). The coin is also uniface having on its observe a ring of 49 pearls and 19 millimeters of diameter and inside it we find, from top to bottom, the entries "XII / GWC / 1654." The interlaced GWC is a monogram of *Geoctroyeerde Westindische Compagnie*. All coins mentioned in the literature have the same characteristics so we can conclude there are no die varieties.

Gastão Dessart, in his *Ensaio Histórico e Descritivo das Primeiras Moedas Cunhadas no Brasil*, 1960, reports that there were only four genuine 12 stuiver coins. This list was increased to five by Prober 1987.

Specimen 1)

The Bernardo d'Azevedo da Silva Ramos Collection, now in the State of Amazonas Collection. The coin was probably purchased with the Collection of Manoel Cícero Peregrino Dias, a collector from Pernambuco who died in 1896, and sold his collection in the last quarter of the nineteenth century. This coin is described in Volume III of Bernardo d'Azevedo da Silva's Collection Catalog published in 1900, on the number 12 (it has 25 mm x 25 mm sides).



Figure 3
12 stuiver in the Museum of Manaus Numismatic Collection. (Specimen 1)
 (Lupércio, 1987)

Specimen 2)

Denmark National Collection. Gastão Dessart says he received rubbings of this coin; although they were not very good, he could confirm it was authentic.

Specimen 3)

Collection of the University of Leiden, Netherlands. Dessart has not gotten images or other details of this coin.

Specimen 4)

Collection Julius Meili. Mentioned in *Das Brasilianische Geldwesen. Die Munzen der Colonie Brazil. 1654 bis 1822*, number 5, page 15. Meili reports that this coin had 49 pearls, 24 mm x 22 mm in size and weight of 5 grams.⁴ Probably this is the same coin mentioned by Prosper Mailliet in his *Catalog Descriptif des Monnaies Obisidionales et de Necessité*, published between 1870 and 1873, from the Collection of Munnicks van Cleef, sold in Amsterdam in 1862 (Prober, 1987).

⁴ "In Silber. 1654. 5. Einseitige Silberklippe von 12 stüber. In einen Perlenkreise: XII (Werthbezeichnung), Monogramm aus den Buchstaben G.W.C. Wie bei den früher angefertigten Goldklippen und darunter die Jahrzahl 1654. 5.-gr. Rar."



Figure 4
12 stuiver portrayed in the *Numismatische Sammlung von Julius Meili, Die Münzen der Colonie Brazil, 1645 bis 1822*. It is the first photographic record of this coin. (Specimen 4)
 (Meili, 1895)

Specimen 5)

Collection Domingos de Goés e Vasconcellos, sold by Jacques Schulman NV on November 24, 1970⁵, Amsterdam, Netherlands. According to Prober, this coin belonged to the Guilherme Guinle Collection. It was first authenticated by Prober in 1944, and later sold to Jael de Oliveira Lima and then to Augusto V. Corsino.



Figure 5
12 stuiver sold by Jacques Schulman on 24 November 1970. (Specimen 5)
 (Schulman, 1970)

Since early records mention it, the earliest being from 1726, and also considering the coinage style, there is no doubt of the authenticity of the 12 stuiver coins of 1654. However, in the second half of the 19th century, Prosper Maillet in his aforementioned book on *Obsidional Coinage*, still an important reference on the

⁵ Jacques Schulman N.V. "Coins, Medals and Decorations of Brasil from an Imperial State", auction Sale 252, November 24th, 1970, p. 9, lot 60: 1654: 1st emission (*1ª emissão?*): 60. 12 stuiver. G.W.C. in monogram, value above, date below (G.W.C. in *monograma; valor em cima, data em baixo*) Uniface. 4,981 gr. Meili 5; Scho. 1451; S.L. 1. Extremely Fine (10.000,-)"

subject even after nearly 150 years of its publication, presented for the first time the silver coins of 10, 20, 30 and 40 stuiver together with the 12 stuiver coin. The coins of 10 and 30 stuiver came from the Van Cleef Collection (Amsterdam, 1862) and the 20 and 40 stuiver from the Callenfels Collection (the 20 stuiver in this collection was made of brass, not silver).

These new coins are somewhat dubious in that they were never authorized and are not based on any monetary system of the period. These pieces are referred to as the *decimal series*. The design of the letters and numbers of the coins does not resemble any of the types minted in gold or the 12 stuiver, and are far different from any coin design from that time.



Figure 6
Decimal Series, coins sold by Jacques Schulman on 24 November 1970.
(Schulman, 1970)

This so-called decimal series created a lot of arguments over the years. In the Prober catalogs they are always presented as forgeries of the nineteenth century. Jacques Schulman on the sale of November 24, 1970, the last time a true silver coin from the Dutch period was brought to sale, offered an extensive explanation to demonstrate the authenticity of these coins by creating a new theory in which the decimal series was a second issue of silver coins; however, this is unlikely to be the case because the Dutch only had six days to make money with a very limited amount of silver. Nevertheless, this was a very important sale of Brazilian Dutch Invasion Coins, as there were 10 gold and silver coins from the period being sold at the same time.

In 1954, in the city of Santos, copies of all values of the Dutch coins in gold, silver, and copper, including the decimal series, with and without goldsmith mark, were made to commemorate the 4th centenary of the establishment of the city of São Paulo. These modern copies are not confused with the authentic coins because they look very modern, always appear in mint state, and most of them have the countermark “CÓPIA” (copy).

Finally, it is important to comment on what might have been the biggest scam of all Brazilian Numismatics, the famous Rio Formoso Hoard (*Botija do Rio Formoso*), also known as Recife Hoard (*Botija do Recife*). The story goes that in 1967 a truck driver called Manoel Crispim Idelfonso and another friend named Raimundo, found a

small jar with small pieces of metal that would turn out to be coins from near the Dutch Invasion times. The jar was found near the construction site of a highway in the town of Rio Formoso, state of Pernambuco. In the first version of the story the number of coins was just a dozen, including small bars of silver and gold, which were divided between Raimundo and Manoel Crispim.

After this nothing further was ever heard from Raimundo; in fact, he never confirmed any facts of the story (some say this person never really existed). However, Manoel Crispim began selling his share of the finding, which mysteriously multiplied to a number considerably higher than the initial amount declared and with types never seen before. The coins included new unrecorded dates, new face values, double struck coins, undated coins, some with squares in the place of the date, etc. All of them with low quality engravings and poor metal alloy (the gold coins, for example, never reach more than 14 carats finesses). In the euphoria of the alleged discovery and lack of knowledge and research, many people bought these coins, paying in some cases high prices, because they believed—or were led to believe—the coins were authentic.

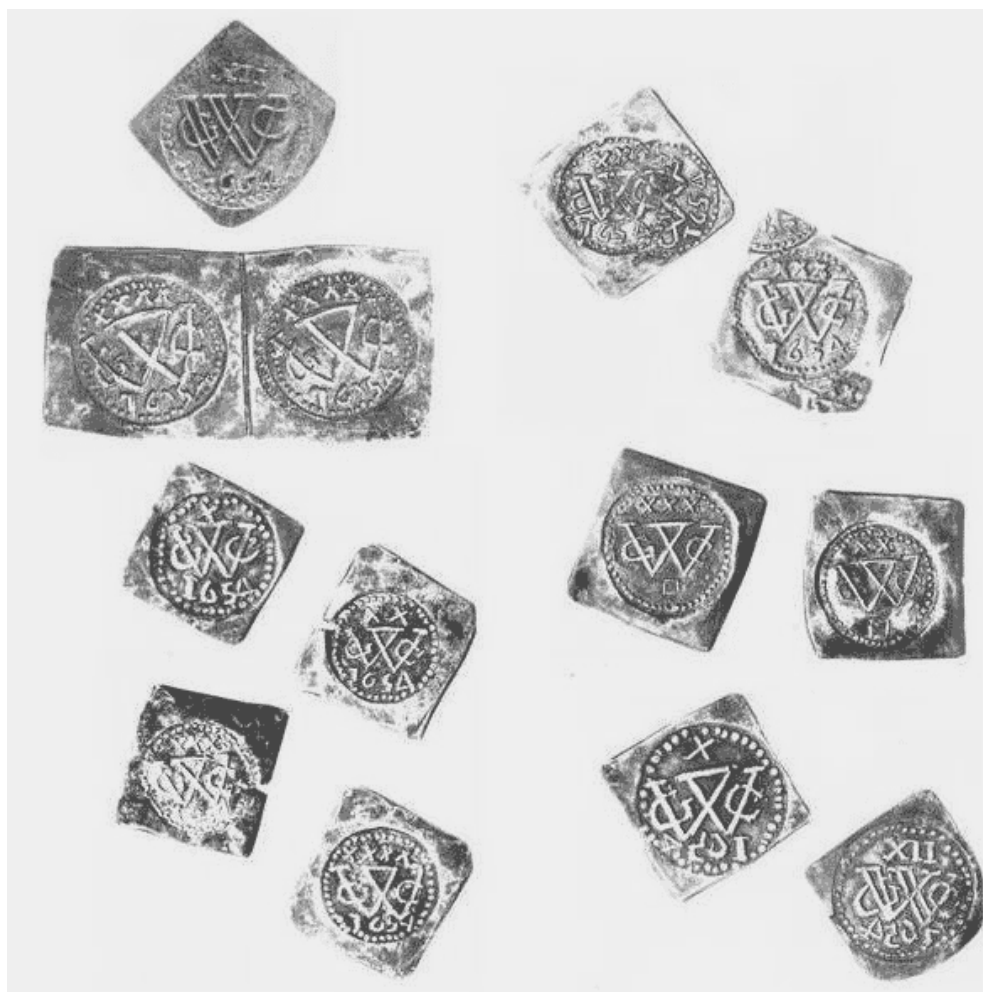


Figure 7
Some forgeries from the Rio Formoso Hoard.
(Lupércio, 1987)

Many legal battles and many articles were published between supporters and detractors of these coins until 1987, when Lupércio Gonçalves Ferreira and Kurt Prober edited books which showed why these coins should not be taken as authentic. Some books tried to support the authenticity of these coins by stating highly doubtful opinions. One opinion is that the coins were made in great haste and therefore these poorly made coins are genuine. On the other hand, coins well made from good metal alloy are actually the fakes. Anyway, there was no record of any coin that resembles the coins of the hoard until the end of the 1960s and even today we can still find such forgeries being bought by the unwary collectors as rarities.

Note: Images not actual size

Acknowledgements:

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NI

Khubilai Khan: 50 Tails

Herman Blanton, NI #LM115

The emperor Khubilai Khan (or Kublai Khan) welcomed Marco Polo into China and thereafter he became famous in Europe and western history by virtue of the accounts of Polo's travels.

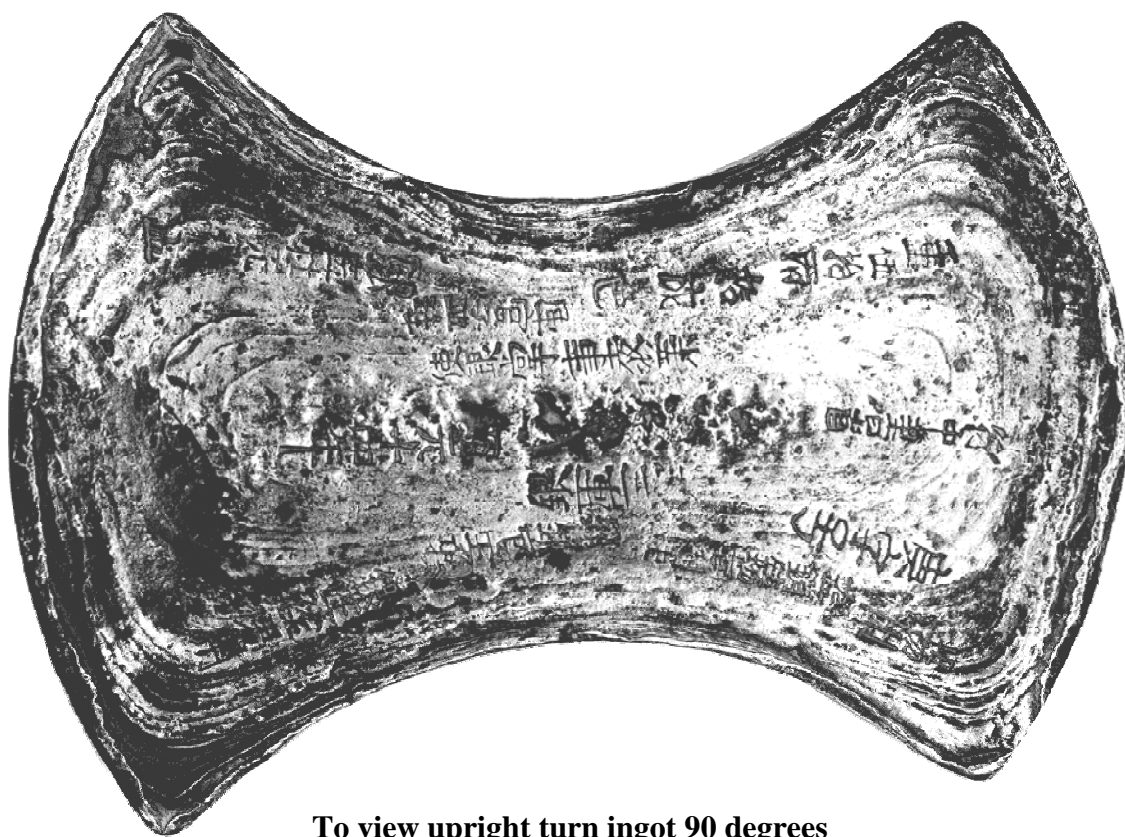
Kublai Khan (1215-1294) is the founder of the Yuan Dynasty. He is a grandson of the God's favored person Genghis Khan and is called "*Yuan Dynasty Shih Tsu Hu Pi Lieh*" by later generations. After defeating his younger brother Alibuge who intended to grab the crown in 1264, Kublai Khan took the throne, with "Zhìyuán" as the reign title. Afterwards, he moved the capital to Yanjing (the current Beijing) and renamed it "Dadu." In 1271, Kublai Khan set "Yuan" as the official name of the nation and then confirmed Dadu as the capital in 1272. After destroying the Southern Song Dynasty in 1279, Kublai Khan accomplished great unification around the whole country and founded the Yuan Dynasty.¹



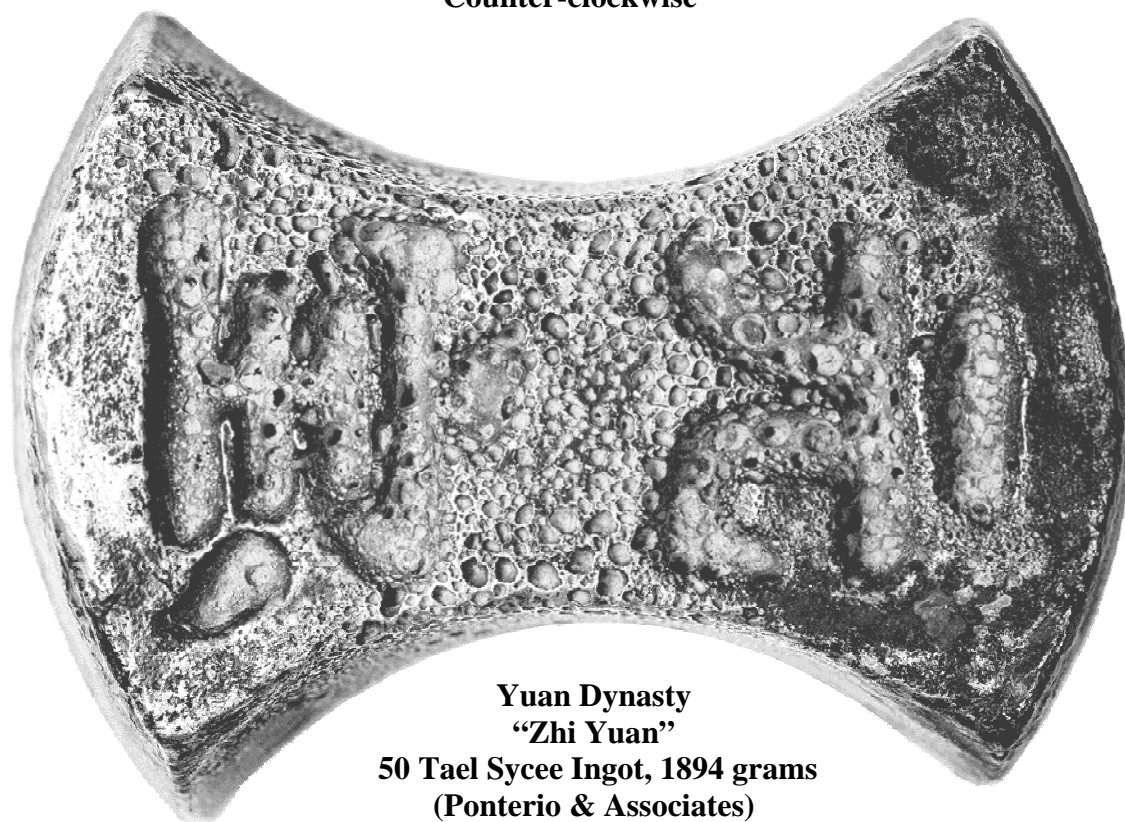
A very interesting *sycee* has appeared in the numismatic market during the last few years and is attributed to Khubilai Khan according to the inscription on the ingot. The ingot was offered by *Steve Album* in 2008 and *Ponterio and Associates* in 2010.² What makes this sycee particularly interesting is its attribution to Khubilai Khan, who along with his grandfather Ghengis Khan, were the two Chinese Emperors most familiar to Westerners.

¹ Text from <http://history.cultural-china.com/en/46History200.html>; image from Wikipedia <http://upload.wikimedia.org/wikipedia/commons/1/1b/YuanEmperorAlbumKhubilaiPortrait.jpg>

² Steve Album Auction #5 lot 381 (7 December 2008), Ponterio & Associates Sale #154 lot 8278 (18-19 June 2010, where it realized \$64,900 including buyer fee).



To view upright turn ingot 90 degrees
Counter-clockwise



Yuan Dynasty
“Zhi Yuan”
50 Tael Sycee Ingot, 1894 grams
(Ponterio & Associates)
(Image not actual size)

Description from Steve Album Auction 5

元朝 Yuan Dynasty: Zhi Yuan (Khubilai Khan), 1260-1294, AR 50 tael sycee (1894g), dated the 14th year of the Zhìyuán era (1277), a rare salt tax sycee inscribed, 揚州 (江蘇) 鹽 Yangzhou (Jiangsu) Salt market [tax] 銷鑄官劉生 Casting official: Liu Sheng, 銷銀官王口...Silver official: Wang X [the square means a character is obscure. A search online indicates that a similar sycee exists on which this name is Wang Ying 瑛.], 銀匠侯君用 Silversmith: Hou Junyong, 行中書省 Province [perhaps indicating provincial level tax?], 至元十四年 Zhiyuán year 14 (1277), 重伍拾兩拾成色 Weight 50 liang, purity level ten, 庫官孟珪 Treasury official: Meng Gui, 銀匠杜元 Silversmith: She Yuan, 庚字号 Number geng zi, 使銀掌事麥業 [Meaning of title obscure, some sort of silver commissioner] Mai Ye, 銀庫三... Silver treasury three.... With denomination at upper left and ruler's name and date at lower center, inscriptions in grass and orthodox style scripts, inscribed 元宝 yuán bǎo [Treasure of the Yuan (Dynasty)] cast into reverse.

Dating the ingot

Even though the emperor's name is not marked on the ingot, it can still be dated by regnal year according to the "era name." The Yuan Dynasty began with Khubilai Khan and only two of the Yuan Dynasty emperors used the "Zhìyuán" regnal title, Khubilai Khan and Toghan-Temür.

According to Wikipedia, "A Chinese era name...is reign period, or regnal title used when traditionally numbering years in an emperor's reign and naming certain Chinese rulers. Some emperors have several era names, one after another, where each beginning of a new era resets the numbering of the year back to year one or yuán. The numbering of the year increases on the first day of the Chinese calendar each year. The era name originated as a motto or slogan chosen by an emperor."
(http://en.wikipedia.org/wiki/Chinese_era_name).

From 1260 to 1264 Khubilai Khan used the era name "Zhongtong." Beginning in 1264 he took the reign title (era name) Zhìyuán. It would not be until seven years later, in 1271, that he would name the country Yuan.

The ingot is marked Zhìyuán which places it in the Yuan Dynasty. From Table 1 below we can see that only two emperors used the "era name" Zhìyuán. Khubilai Khan used Zhìyuán between the years 1264 and 1294. Toghan-Temür used Zhìyuán twice, the first time between the years 1335 and 1340, and a second time between the years 1368 and 1370. Since neither Zhìyuán period for Toghan-Temür lasted fourteen years the ingot cannot be ascribed to him. That leaves only Khubilai Khan who used the title for 31 years. His initial year 1264 is counted as year one, making 1277 his 14th year. Therefore the ingot can be attributed to Khubilai Khan, 1277.

Khan name	Period of Reign	Era Name
Kublai Khan	1260-1294	
	1260-1264	Zhongtong
	1264-1294	Zhìyuán
Temür Öljeitü Khân	1294-1307	
	1295-1297	Yuanzhen
	1297-1307	Dade
Qayshan Gülük	1308-1311	
	1308-1311	Zhida
Ayurparibhadra	1311-1320	
	1312-1313	Huangqing
	1314-1320	Yanyou
Suddhipala Gege'en	1321-1323	
	1321-1323	Zhizhi
Yesün-Temür	1323-1328	
	1321-1328 <i>[sic]</i>	Taiding
	1328	Zhihe
Arigaba	1328	
	1328	Tianshun
Jijaghatu Toq-Temür	1328-1329, 1329-1332	
	1328-1330	Tianli
	1330-1332	Zhishun
Qoshila Qutuqtu	1329	
Irinchibal	1332	
	1332	Zhishun
Toghan-Temür	1333-1370	
	1333	Zhishun
	1333-1335	Yuantong
	1335-1340	Zhìyuán
	1341-1368	Zhizheng
	1368-1370	Zhìyuán

Table 1
Yuan Dynasty Emperors

Source: http://en.wikipedia.org/wiki/List_of_Emperors_of_the_Yuan_Dynasty



至元十四年
Zhiyuán Year 14



至元
Zhi Yuán



十四年
10 4 year (year 14)

These characters are located at bottom of center column on the front of the ingot.

My thanks go to Joe Lang and Steve Album for providing the ingot description and to Ponterio & Associates for the ingot images.

Please contact me if you find any errors in this article or if you have additional information.

NI

Saxon England: Danelaw, Viking Coin Weight CNG



ANGLO-SAXON, Danish East Anglia ("Danelaw"). Coin weight. Late 9th century. Circular lead weight with inset coin (24.01 g with coin). Coin is an AR Penny of Alfred the Great (871-899): first coinage, lunette type, circa 871-875; Canterbury mint, moneyer Eadulf (SCBC -; cf. BMC 187 [for moneyer on cross-and-lozenge type]; North 625; SCBC 1057). Cf. G. Williams, "Anglo-Saxon and Viking Coin Weights," *BNJ* 69 (1999), 21. Very rare, and an unrecorded moneyer for Alfred's lunette coinage.

Williams' analysis of the known weights of this type clearly places them in the Danelaw during the later 9th century, when the Viking economy was still bullion-based, and weights were used for weighing both coinage and bullion. As with many of the known examples, this particular weight, at 24.01 g, is equivalent to a Viking ounce (*eyrir*) of 24-26.6 g. The purpose of the coins set into one end of these weights is uncertain, but Williams argues that they served as a symbol of authority. Although the Viking economy was still pre-monetary, Williams notes that the Vikings were familiar with coinage and likely recognized that their designs were a symbol of authority. He also suggests that the Vikings were probably familiar with the Anglo-Saxon weights, which were validated by being stamped with official dies, and argues that the lack of coin dies for validating their own weights was remedied by applying a coin within each. Williams points out that the fact that the coins were issued by Anglo-Saxon kings was irrelevant, as the vast majority of the Vikings were illiterate.

NI

St. Eligius The Bru Sale

St. Eligius was born at Chaptelat, near Limoges, about 588. After serving his apprenticeship with Abbo, the master of the mint at Limoges, he became himself mint master, then chief counselor under kings Clotaire II, Dagobert and Clovis II. Known for his honesty, piety, great talents and efficiency, he was consecrated bishop of Noyon and Tournai on 13 May 641. He worked for twenty years to convert the pagan population of Flanders to Christianity. He died on 1 December 660 and was buried at Noyon. He is particularly honored in Belgium and still famous today from an old children's song [*Le Bon roi Dagobert*]. St. Eligius is the patron saint of horses and those who work with them, metalworkers and, of course, coin collectors!



Clovis II, Gold Tremissis
Moneyer “ELICI” backwards either side of cross
(Image enlarged)

Clovis II: 19 January 639 - 31 October 657. Tremissis (AV, 1,03g, 8h). Paris. 639-641. Eligius monetarius. **Obv.** PARIS[IVS] Diademed head right. **Rev.** [CH]LODOV[IVS REX] Anchored cross; ELICI to sides. Belfort 3354. *Revue Numismatique* 1977 no 13. Very rare. Apparently this is the third piece known and the only one with a retrograde moneyer's name. Undoubtedly the most famous Merovingian issue!

The *Bru Sale Auction 1*, lot 75.

Further reading

St. Eligius: http://en.wikipedia.org/wiki/Saint_Eligius

St. Eligius by Petrus Christus: <http://www.all-art.org/history214-7a.html>

Editor

NI

Money in India
Part 2: A Survey (continued)
Dr. Johnson C. Philip, NI #2717

While silver Punch-Marked Coins were used all over India at least from 600 to 200 BC, the coinage of India underwent a drastic change from 200 BC onwards. For the first time the coinage split into two distinct coin families: North Indian Coins and South Indian Coins.

This is because foreign invaders started attacking and subduing the northern part of India by this time, and they heavily influenced the coinage and monetary system in the North of India. Very few invaders went south beyond what today is called the Maharashtra state. Thus the coinage in the four southern states evolved almost totally independent of the coinage in the North. The divergence was so great that even a person uninitiated in numismatics can spot the difference easily.

North Indian coinage: North Indian coinage from roughly 200 BC onwards started sporting the image of the ruler and inscriptions. Images other than that of the ruler, plus numerous symbols, were also introduced but the image of the ruler and corresponding inscriptions add tremendous value to these coins in discovering and reconstructing ancient Indian history. Indestructible that coins are, they are able to survive longer than other media of writing such as leaves and animal skins that were available during this period. Romans, Greeks, and allied people were the first to issue these kinds of coins.

Initially the inscriptions were in Greek, but they were followed by *Brahmi*. The arrival of the bull and horseman series of coins with hundreds of variations brought inscription in *Sarada* and derivative languages. One can see a gradual evolution from Brahmi up to *Nagari* scripts via *Sarada*.

Persian was introduced as the language of inscription some time after that, and with that came voluminous inscriptions and elimination of almost all pictures and images, except symbols. Large gold, silver and copper coins (10 grams or more) became common. The larger size in turn helped those coins to survive and be discovered centuries after they went out of circulation. The large amount of inscription on these coins lends precious information about rulers, the years in which the coins were minted, mint names, co regents, regnal years, and many other items of historical information. This information has in turn enriched the process of reconstructing North Indian history. The names of some important rulers were spotted on the coins first, and discovered much later in other inscriptions.

South Indian Coinage: Once the two streams of coins became isolated, the South Indian coinage took a distinctly Indian cultural form. The most striking feature is that practically no ruler ever placed his personal image on the coins. The exceptions came only in the last two centuries or so. This means that there is no easy way to know how kings and rulers of South India looked until around AD 1800 or later.

Most of these coins contained no inscription for a long span of time. This gives great

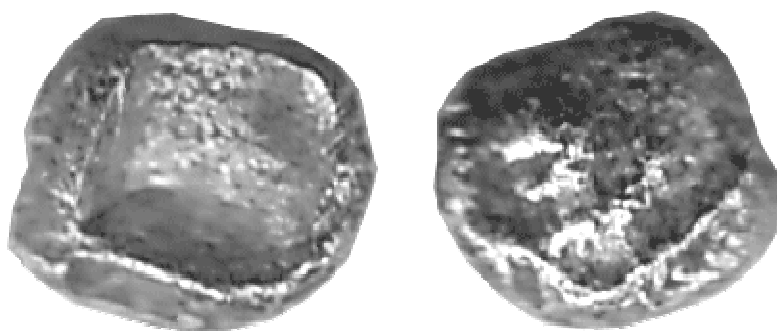
difficulty to numismatists and historians to identify the precise years in which these coins were issued. This also makes it difficult to identify the rulers who issued these coins. As a consequence, reconstruction of local history as well as the history of coinage is more difficult in the South than in North India. This is also one reason why breakthroughs in South Indian coin studies are more difficult and slow to be published, causing a slowdown of South Indian coin studies, though the number and variety of coins issued in the South is very large.

The average size of South Indian coins is much smaller than that of their North Indian counterparts. The weight is also proportionately low. This in turn has made it easy for South Indian coins to get chemically destroyed in underground hoardings. This has also made it difficult to spot and discover South Indian coins from places where they might happen to lie for centuries, such as in underground earthen pots.

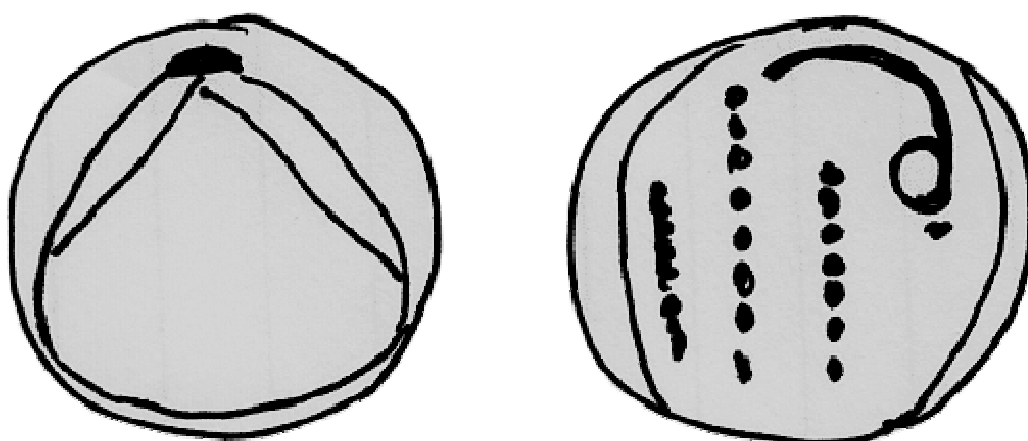


The South Indian gold coin depicted in the picture is less than two millimeters in size, and I almost lost it when I took it out of the coin-holder for scanning. I had to scan it at 600 dpi to make it visible in the picture. Compare it with the other coins and also

with the scale. Gold and silver coins of this size were used in many places in South India. One does not see gold or silver coins of corresponding size in North India.



Gold Coin (enlarged)



Composite drawing from multiple specimens

Fortunately, the South Indians have a habit of dropping coins into rivers as they pass alongside them or as they cross bridges. Also, a large number of famous South Indian temples are built on riverbanks so that the river flows on at least one side of the temple. Some temples are built even in the middle of rivers and a bridge connects them with the shore. Here also people liberally drop coins into the river to propitiate gods.

Hundreds of millions of coins have thus fallen into South Indian riverbeds over the last three millennia. Coated by sediments, a large number of these coins have been preserved from additional chemical attacks. These cement-encrusted coins are discovered every year from South Indian rivers when the water is low or when the rivers are dry. Picking up coins from riverbeds has become a profession for thousands of people in South India, and this brings in hundreds of thousands of coins to the numismatic market every year. Encrusted coins require electrolysis or similar methods to clean the cement shell on them. On the other hand, uncoated coins tend to be pitted due a chemical reaction over hundreds of years in the riverbed.

This article is continued from *NI Bulletin* 45 #3/4, March/April 2010.

NI

Charles IV of Spain
Proclamation Medal of Sanlúcar de Barrameda
Herman Blanton, NI #LM115



Spain: Charles IV, 1789, AR proclamation medal in size of four real. Obv.: Circular shield with collar of the Order of the Golden Fleece around and crown above. •CAROLUS•IV•D•G•[crown]•HISP•REX•1789•. Rev.: Winged bull of St. Luke lying on water and holding a pot suspended by a handle (bail). Behind the bull a castle with tower and above that an eight pointed star. PHARUM LUCIFERI IN EIUS ACLAMAT • (below SA•). Herrera 91. (Image courtesy of Aureo Subastas, 16 September 2009, lot 2044.)

According to a note in Herrera, *Medallas de proclamaciones y juras de los Reyes de España*, 1882, p. 126, the King was proclaimed in Sanlúcar on 7 June 1789. Therefore we can assume that is the issue date for this medal.



Coat of Arms
Sanlúcar de Barrameda

On the medal it appears the bull is lying on the water, however, he should be lying on the gospel of St. Luke which is floating on the water.

The city of Sanlúcar de Barrameda is positioned at the mouth of the Guadalquivir River some 100 km downstream from Seville. Many Spanish ships departed from Sanlúcar, including Christopher Columbus on his third trip to the new world in 1498 and Ferdinand Magellan who kept his fleet there for five weeks in 1519 before sailing out into the Atlantic for what would be the first circumnavigation of the world.

NI

NI Educational Programs

ANA World's Fair of Money Boston, August 10-14, 2010

Billed as the largest coin show in the world, this year's World's Fair of Money will be at the John B. Hynes Convention Center, 900 Boylston Street, Boston, Ma.



NI Educational Programs

ANA World's Fair of Money: August 11-14, 2010

The Numismatics International Education Program Moderator, Howard A. Daniel III, will be managing a club table for NI (and IBNS, NBS & PCF) at the ANA World's Fair of Money in Boston.

There will be an NI meeting at 11AM on Saturday, August 14, in a meeting room to be described in the show program. All NI members are welcome and should bring one piece from their collection or one bought on the bourse to describe during the show-and-tell part of the meeting.

The NI club table can be designated as a meeting place for NI members, and members can also volunteer to staff the table so Howard can look around the bourse and attend other meetings. Howard is looking forward to meeting new and old NI members in Boston.



Library Report

The Numismatics International Library has received the book *A Numismatic History of Ecuador*. Our thanks go to Alan Luedeking, who donated the book on behalf of Michael Anderson (author) and Dale Seppa (coordinating editor). The call number for this book is FE60.AndM:2001:NHE. This and other books in the NI Library are available for loan to NI members. Consult the NI web site for a list of books in the library.

